

On the type specimen, type locality,
distribution and clutch size of the Sunbittern
Eurypyga helias (Pallas 1781)

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Received 12 December 1994

During research into the literature on the Sunbittern *Eurypyga helias*, we have encountered several inaccuracies. Perhaps, because of the small volume of information written about this bird, these have been repeated in subsequent papers as factual when they are not. We discuss the origin of the type specimen and the type locality on the basis of the original description, and we offer evidence to correct statements about the distribution and clutch size.

Type specimen

The Sunbittern was described in gothic German and given its original scientific name *Ardea helias* by Petrus Simon Pallas in 1781. This description includes a well-drawn, hand-coloured plate of the bird. Pallas mentions that the Sunbittern had already been depicted and vaguely described by contemporary writers. In 1759 a philosopher, Fermin, had given a vague account of a bird that was known then as "*Sonnenvogel*" and "*Sonnenreyger*" (Sunbird and Sunheron) in Dutch Guiana and as "*Oiseau du Soleil*" (Bird of the Sun) in French Guiana. Then in 1772 an Abbot Rozier had published a satisfactory figure and described a bird that he called the "*Petit Paon des Roseaux de Cayenne*" (Little Reedpeacock of Cayenne). Newton & Gadow (1896) reported other early confusions regarding the naming of the Sunbittern, however they list the Fermin publication as 1769 and not 1759 as it is in Pallas (1781).

Pallas confirms that both Fermin's description and Abbot Rozier's account refer to the species he is describing, but neither of them had tried to classify it or give it a scientific name. Pallas never visited South America (J. Haffer pers. comm.), and it is obvious from his paper that he described the Sunbittern from the rare, mounted specimens in the natural history cabinets (collections) of West Europeans. Thus, a unique type specimen cannot be designated.

Type locality

After the description by Pallas, later authors that we consulted referred to Suriname as the locality of origin of the Sunbittern (Berlepsch & Hartert 1902, Chubb 1916, Peters 1934, Friedmann 1948, Haverschmidt 1955), with the exception of Hellmayr & Conover (1942), who gave it as Brazil. Without explanation Haverschmidt, in a later publication (1968), changed the type locality to Brazil, perhaps following the example of Phelps & Phelps (1958) in their Venezuelan checklist. We find no documented reason for the recent use of Brazil as the type locality.

Sunbitterns in West European natural history collections of the 18th century originated without a doubt from the tropical coastal regions of northeastern South America. The mounted specimens in the mostly Dutch collections were most likely taken from Dutch Guiana (now Suriname). In the second half of the 18th century this Dutch colony was the most flourishing in the Guianan region where Dutch collectors of natural history specimens, particularly birds, were very active (Gordijn 1977).

Pallas titled his paper "Description of the so-called Surinam Sunheron (*Ardea helias*)", and distinctly describes what he calls "a rare Brazilian bird". The countries mentioned by earlier authors are irrelevant, because the type locality should be that country from where the specimen(s) came that were actually seen by the person making the formal nomenclatorial description. Although Pallas never specifically says the specimen that he carefully described and figured was from Brazil, he suggests that it was. Therefore we believe the correct type locality should be northeastern Amazonian Brazil. Regardless, whether the type locality is Suriname or Brazil, it would have no effect on nomenclature as the nominate race occurs throughout both countries.

Range

The range of the Sunbittern, now differentiated into three well-defined subspecies, extends from southern Mexico south in appropriate habitat to approximately 20°S in the Brazilian Amazonas including tropical areas of Bolivia and Peru (Meyer de Schauensee 1966, Blake 1977, Sick 1993). In the generally excellent book *A Guide to the Birds of Colombia* (Hilty & Brown 1986), the final line under the Sunbittern range reads "n Argentina, and Uruguay (rarely c Chile)". This must be the result of a production error, and pertains to some other species (*vide* Hilty *in litt.*), because the three countries of this line lie more than 1000 km south of the known Sunbittern range.

Clutch size

While it may be true that in the future a Sunbittern clutch of three eggs will be found, no three-egg clutch has been reported in the literature yet. Some authors (Van Tyne & Berger 1959, Lyon & Fogden 1989, Haye 1989) have stated that the clutch is 2–3 eggs, citing variously Bartlett (1866), Riggs (1948), and Wetmore (1965).

The frequently cited article by Bartlett (1866) unambiguously states that while three eggs were laid by a single female in 1865 in the London Zoo, the first two were laid "in May" and "the early part of June", perhaps a clutch of two. The third egg of Bartlett's zoo bird was laid at "the end of August" after the pair of Sunbitterns had successfully raised the chick of the second egg. Clearly this was a second nesting of this bird. Riggs (1948) says that the Bartlett bird "laid three eggs", but follows this with a correct recounting of the circumstances.

Wetmore (1965) describes "three single eggs" from Venezuela in the USNM, collected by the same person, but in two different years. Hilty & Brown (1986), obviously referring to these same three eggs, follow it with "10 May–9 July", a two month period clearly intending to indicate

time of laying and not clutch size. One and two-egg clutches have been reported by various authors for wild-living birds (Penard & Penard 1908, Snethlage 1928, Skutch 1947, Lyon & Fogden 1989, Thomas & Strahl 1990).

Acknowledgements

For help in various ways we are most grateful to Jon Fjelds , J rgen Haffer, David Snow, James P. Kirnan, William Belton, John B. Trent, Lloyd Kiff, Roland Van Bockstaele, Michael P. Walters and Lynx Edicions. Kenneth C. Parkes read an early draft, made many helpful suggestions, and clarified the type locality problem. The staffs of the  sterreichischen Nationalbibliothek (Vienna, Austria) and Claus Nielsen of the Universitetets Zoologiske Museums Bibliothek (Copenhagen, Denmark) were helpful in providing copies of the original papers by Pallas and Illiger.

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